

Depression, September 20 to 25, 1938.—A depression appeared about 500 miles northeast of Guam, moved in a northwesterly direction and disappeared about 400 miles east of Naha, Nansei (Loochoo) Islands.

The southwest quadrant current which was flowing over Guam and which had weakened after September 18, now increased in strength, September 20 and following days, reaching velocities as high as 66 k. p. h. (September 21) and then weakening. Observations from the S. S. *Thurland Castle*, traveling along a westerly course and passing some 300 miles north of Guam about this time showed pressure values above 751.0 mm (29.567 inches) and winds from the east or the north quadrants, never over force 3. After September 22, the velocities reported from Guam gradually became weaker, while the directions remained from the southwest quadrant.

Typhoon, September 25 to 28, 1938.—Forming quickly about 300 miles east of southern Indochina, near latitude 12°30' N., longitude 114° E., a depression moved along a west-northwesterly direction, intensified September 26, and passed close to and south of Tourane as it entered Indochina. It filled up during the afternoon hours of September 28 over the regions southwest of the Gulf of Tong King.

The lowest pressure reported from Indochina stations as this disturbance formed and moved into the continent, was 747.0 mm (29.410 inches) from Hue, and 747.1 mm (29.414 inches) from Quangnai, September 27, 2 p. m. (Manila time). Winds were of force 3 and 7, respectively, from the northeast quadrant, but other stations reported force 9 at various times during the course of the typhoon.

There was a front extending across the southern part of Indochina during this period. A northeasterly air stream flowed over Phulien, Hanoi, at times tending to back to the northwest quadrant. Saigon consistently reported southwest-quadrant winds, but did not report every day. Velocities on both sides of the front were not strong, scarcely ever exceeding 45 k. p. h. Siam stations during these days had southwest and west quadrant winds, which were not very strong, but an unbroken series of ascents is not available. Likewise, insufficient reports from Malaya stations prevent any discussion of the air streams over that locality during this storm's existence.

SEA-SURFACE TEMPERATURE SUMMARY FOR AN AREA NORTHEAST OF THE BAHAMA ISLANDS, 1912-31

By GILES SLOCUM

The area embraced in this summary comprises five 1° squares, namely; from 25° N. to 30° N., and 74° W. to 75° W.

This area is in the latitude of the Florida Peninsula, and its southern part is directly east of the northernmost Bahama Islands. It is just north of the northern margin of the Bahama, or Antillean Current as it approaches the Gulf Stream. This trans-Bahama strip is therefore one nearly isolated from continental weather influences and is, in addition, outside the main sea currents supplying warm water to the North Atlantic Drift.

There are several points of difference and several of similarity between surface water temperature conditions in this eastward area and those in the parallel 3° 5' by 1° strip, traversed by the Gulf Stream, within the same latitude range, immediately east of the Florida Peninsula. Some of these similarities and differences are as follows:

In the Florida Strait-Gulf Stream waters, the surface temperature shows no significant gradient with latitude. In the trans-Bahama strip, the water is about a degree cooler in summer at latitude 30° than at 25°. In winter, this temperature difference becomes several degrees. As a consequence, while in winter⁴ the surface water in the latter area is as warm in its southern part as that in the strait, it is at least 3° cooler at the 30th parallel during this season. In summer, the trans-Bahama water surface is cooler throughout its latitudinal extent than is the Florida Strait water. The Gulf Stream water surface fluctuates in temperature about its seasonal normal more than does the surface water in the trans-Bahama area, and departures from normal are more persistently of the same sign in the latter, showing much less tendency to change with fluctuations of air temperature over the Southeastern States.

Temperatures are given to tenths of a Fahrenheit degree in the table, except for 1918. For this year only 41 observations are available, so the temperatures are given to whole degrees. No data could be found for September and October, 1918. In computing means, the interpolated temperatures, 82.0° for September 1918, and 80.1° for October 1918, were used.

This is the twelfth of a series of temperature-history tabulations of this character, showing sea-surface temperatures for small areas in American and western North Atlantic waters. The first of the series appeared in the November 1934 MONTHLY WEATHER REVIEW, and the last previous tabulation appeared in the June 1938 issue.

³ Slocum, Giles: Sea-Surface Temperature Summary for the Outer Florida Strait, 1912-33; MONTHLY WEATHER REVIEW, vol. 61, Aug. 1936, p. 279.
⁴ Ibid: The Normal Temperature Distribution of the Surface Water of the Western North Atlantic Ocean; MONTHLY WEATHER REVIEW, Vol. 66, Feb. 1938, pp. 39-43.

Monthly and annual mean sea-surface temperatures northeast of the Bahama Islands, 1912-31

Year	Total number of observations	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1912	251	74.3	72.1	74.0	75.0	77.3	80.6	80.7	81.9	82.2	81.4	76.8	76.5	77.7
1913	234	74.7	74.3	74.6	73.1	75.1	77.3	80.7	80.9	80.2	78.4	76.6	72.8	76.6
1914	199	71.4	72.1	71.6	73.4	74.1	80.2	82.1	83.1	81.5	79.5	77.1	75.9	76.8
1915	266	73.7	72.6	68.9	70.7	76.0	79.3	81.8	83.0	83.0	81.0	77.3	73.2	76.7
1916	192	72.1	72.6	71.5	71.6	75.3	78.4	80.9	82.3	81.6	78.8	75.8	72.1	76.0
1917	154	72.5	71.6	72.2	72.1	74.6	78.0	80.6	81.8	81.5	80.5	74.9	71.7	76.0
1918	41	70	72	72	73	75	74	87	82	(?)	(?)	77.0	76.5	76.8
1919	124	72.5	72.3	72.3	71.4	75.4	79.2	81.9	82.2	82.2	81.7	77.3	75.0	77.0
1920	227	72.5	71.5	70.9	73.7	75.1	78.2	80.9	82.1	81.7	79.5	76.5	75.4	76.5
1921	255	74.1	72.5	74.2	74.2	74.8	78.2	81.2	81.9	81.9	80.8	77.5	74.9	77.2
1922	371	72.7	71.9	72.2	73.8	75.6	79.6	80.8	81.6	81.8	80.4	78.0	75.5	77.0
1923	585	72.8	71.9	72.3	73.8	75.6	78.7	80.7	82.0	82.5	79.3	75.2	73.7	76.5
1924	653	73.3	70.5	70.8	72.1	77.9	80.2	81.6	82.5	81.1	79.2	76.4	74.0	76.6
1925	709	73.2	72.5	72.8	73.7	75.9	79.3	81.0	82.5	82.6	80.6	77.4	74.9	77.2
1926	825	73.6	72.5	72.2	74.2	76.2	79.7	82.2	83.3	83.1	80.8	78.1	75.8	77.6
1927	908	72.0	74.6	72.2	72.9	76.5	80.4	81.7	82.3	82.0	79.7	76.8	73.7	77.1
1928	1,011	72.4	72.7	72.8	73.0	74.3	78.9	81.4	82.7	82.4	80.5	77.4	74.6	76.9
1929	912	73.1	73.1	73.4	74.8	77.0	78.5	80.7	81.8	81.8	79.5	77.4	75.3	77.2
1930	838	74.6	72.2	72.3	73.3	76.0	77.9	81.1	82.2	82.3	79.7	76.8	74.2	76.9
1931	824	71.6	70.8	69.8	72.9	74.9	78.5	82.0	83.4	83.0	79.9	75.7	75.3	76.5
Number of years of record.....		30	20	20	20	20	20	20	20	19	19	20	20	20
Mean, 1912-31.....		72.8	72.3	72.1	73.1	75.7	78.8	81.5	82.3	82.0	80.1	76.8	74.5	76.8

¹ Means were computed, using interpolated values for missing months. All monthly means were carried to one decimal place when computing annual and period means, which latter are, therefore, not exact means of figures given in the body of the table.
² No data.